

WHAT IS CLAIMED IS:

1. An electrical generating system, comprising:
an electric motor coupled to a variable power source;
5 a variable coupling connected to an output shaft of the motor;
a switching mechanism for adjusting the variable coupling;
a gear assembly connected to the variable coupling; and
an electrical generator connected to the gear assembly.
- 10 2. The system of claim 1, wherein the variable coupling comprises
opposed first and second plates each having permanent magnets affixed
thereto, wherein the extension of the magnets on at least one of the plates
are adjustable.
- 15 3. The system of claim 2, wherein the first plate is connected to the
output shaft of the motor and includes radially positioned, spaced apart
permanent magnets extending therefrom, and the second plate is in spaced
relation to the first plate and includes radially positioned, spaced apart
20 permanent magnets extending therefrom so as to extend between the
permanent magnets of the first plate, wherein extension of the permanent
magnets on at least one of the plates is adjustable, whereby the rotation of
the first plate by the motor causes the second plate to rotate by repulsive
magnetic force.
- 25 4. The system of claim 3, wherein the first plate comprises at least
one solenoid for adjusting or disengaging the variable coupling.
- 30 5. The system of claim 1, wherein the gear assembly comprises a
first gear rotatably connected to the variable coupling and rotatably engaged
with a second gear of smaller diameter, the second gear being rotatably
engaged with a third gear having a larger diameter than the second gear, the
third gear operably connected with the electrical generator.

6. The system of claim 5, wherein the gear assembly has a high transmission ratio.

5 7. The system of claim 6, wherein the transmission ratio from the first gear to the third gear is at least 100 to 1.

10 8. The system of claim 5, wherein the gear assembly further comprises a fourth gear between the second and third gears which is connected to a fifth gear, the fifth gear being operatively connected to a second variable coupling connected to an external device.

15 9. The system of claim 8, wherein the second variable coupling comprises opposed third and fourth plates each having permanent magnets affixed thereto, wherein the extension of the magnets on one of the plates of the second variable coupling are adjustable.

20 10. The system of claim 9, wherein the third plate is connected to the fifth gear and includes radially positioned, spaced apart permanent magnets extending therefrom, and the fourth plate is in spaced relation to the third plate and includes radially positioned, spaced apart permanent magnets extending therefrom so as to extend between the permanent magnets of the third plate, wherein the extension of the permanent magnets on one of the plates of the second variable coupling is adjustable by at least one solenoid connector to the one of the plates of the second variable coupling, whereby
25 the rotation of the third plate by the motor causes the fourth plate to rotate by repulsive magnetic force.

30 11. The system of claim 9, wherein the external device includes a rotating blade.

12. The system of claim 1, wherein the electrical generator is electrically coupled to the motor.

13. An electrical generating system, comprising:
an electric motor coupled to a variable power source;
a variable coupling connected to an output shaft of the motor;
a switching mechanism for adjusting the variable coupling;
5 a gear assembly connected to the magnetic coupling, the gear
assembly having a high transmission ration and including a first gear rotatably
connected to the variable coupling and rotatably engaging a second gear of
smaller diameter, the second gear rotatably engaging a third gear having a
larger diameter than the second gear; and
10 an electrical generator connected to the gear assembly through the
third gear and electrically coupled to the motor.

14. The system of claim 13, wherein the variable coupling
comprises opposed first and second plates each having permanent magnets
15 affixed thereto, wherein the extension of the magnets on at least one of the
plates are adjustable.

15. The system of claim 14, wherein the first plate is connected to
the output shaft of the motor and includes radially positioned, spaced apart
20 permanent magnets extending therefrom, and the second plate is in spaced
relation to the first plate and includes radially positioned, spaced apart
permanent magnets extending therefrom so as to extend between the
permanent magnets of the first plate, wherein extension of the permanent
magnets on at least one of the plates is adjustable, whereby the rotation of
25 the first plate by the motor causes the second plate to rotate by repulsive
magnetic force.

16. The system of claim 15, wherein the first plate comprises at
least one solenoid for adjusting the variable coupling.

17. The system of claim 13, wherein the gear assembly further
comprises a fourth gear between the second and third gears which is

connected to a fifth gear, the fifth gear being operatively connected to a second variable coupling connected to an external device.

5 18. The system of claim 17, wherein the second variable coupling comprises opposed third and fourth plates each having permanent magnets affixed thereto, wherein the extension of the magnets on one of the plates of the second variable coupling are adjustable.

10 19. The system of claim 18, wherein the third plate is connected to the fifth gear and includes radially positioned, spaced apart permanent magnets extending therefrom, and the fourth plate is in spaced relation to the third plate and includes radially positioned, spaced apart permanent magnets extending therefrom so as to extend between the permanent magnets of the third plate, wherein extension of the permanent magnets on at least one of
15 the plates of the second variable coupling is adjustable by at least one solenoid connected to the at least one of the plates of the second variable coupling, whereby the rotation of the third plate by the motor causes the fourth plate to rotate by repulsive magnetic force.

20 20. An electrical generating system, comprising:
 an electric motor coupled to a variable power source;
 a first variable coupling connected to an output shaft of the motor;
 a switching mechanism for adjusting the first variable coupling,
wherein the first variable coupling comprises opposed first and second plates
25 each having permanent magnets affixed thereto, wherein the extension of the magnets on at least one of the plates of the first variable coupling are adjustable by at least one solenoid connected to the at least one plate of the first variable coupling;
 a gear assembly having a high transmission ratio connected to the
30 first variable coupling;
 an electrical generator connected to the gear assembly and electrically coupled to the motor; and
 an external device;

wherein the gear assembly comprises a first gear rotatably connected to the first variable coupling and rotatably engaged with a second gear of smaller diameter, the second gear being rotatably engaged with a third gear having a larger diameter than the second gear, the third gear operably connected with the electrical generator, a fourth gear between the second and third gears, the fourth gear connected to a fifth gear operatively connected to a second variable coupling connected to the external device;

wherein the first plate is connected to the output shaft of the motor and includes radially positioned, spaced apart permanent magnets extending therefrom, and the second plate is in spaced relation to the first plate and includes radially positioned, spaced apart permanent magnets extending therefrom so as to extend between the permanent magnets of the first plate, wherein extension of the permanent magnets on at least one of the plates of the first variable coupling is adjustable by the at least one solenoid connected the at least one of the plates of the first variable coupling, whereby the rotation of the first plate by the motor causes the second plate to rotate by repulsive magnetic force;

wherein the second variable coupling comprises opposed third and fourth plates each having permanent magnets affixed thereto; wherein the extension of the magnets on one of the plates of the second variable coupling are adjustable, wherein the third plate is connected to the fifth gear and includes radially positioned, spaced apart permanent magnets extending therefrom, and the fourth plate is in spaced relation to the third plate and includes radially positioned, spaced apart permanent magnets extending therefrom so as to extend between the permanent magnets of the third plate, wherein extension of the permanent magnets on the one of the plates of the second variable coupling is adjustable, by at least one solenoid connected to the one of the plates of the second variable coupling, whereby the rotation of the third plate by the motor causes the fourth plate to rotate by repulsive magnetic force.